# City of Germantown Water Quality Report 2019

**Is my drinking water safe?**
Yes, our water meets all of EPA's health standards. We have conducted numerous tests for over 80 contaminants that may be in drinking water. As you'll see in the chart on the back, we only detected 8 of these contaminants. We found all of these contaminants at safe levels.

**What is the source of my water?**
Your water, which is ground water, comes from the Memphis Sand Aquifer. Our goal is to protect our water from contaminants and we are working with the State to determine the vulnerability of our water source to ***potential*** contamination. The Tennessee Department of Environment and Conservation (TDEC) have prepared a Source Water Assessment Program (SWAP) Report for the untreated water sources serving water to this water system. The SWAP Report assesses the susceptibility of untreated water sources to ***potential*** contamination. To ensure safe drinking water, all public water systems treat and routinely test their water. Water sources have been rated as reasonably susceptible, moderately susceptible or slightly susceptible based on geologic factors and human activities in the vicinity of the water source. The City of Germantown sources rated as reasonably susceptible to potential contamination.


An explanation of Tennessee's Source Water Assessment Program, the Source Water Assessment summaries, susceptibility scorings and the overall TDEC report to EPA can be viewed online at https://www.tn.gov/environment/program-areas/wr-water-resources/water-quality/source-water-assessment.html or you may contact the Water System to obtain copies of specific assessments.

A wellhead protection plan is available for your review between 7:00am - 3:00pm, Monday-Friday; at 7648 Southern Ave. Water Plant personnel will be available for assistance.

**Other information**
The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells.
As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.
Contaminants that may be present in source water:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial, or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.
- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA and the Tennessee Department of Environment and Conservation prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

**How can I get involved?**
The Mayor and Board of Alderman meet on the second and fourth Monday each month at the Municipal Center. Please feel free to participate in these meetings.

**Is our water system meeting other rules that govern our operations?**
The State and EPA require us to test and report on our water on a regular basis to ensure its safety. We have met all of these requirements. Results of unregulated contaminant analysis are available upon request. We want you to know that we pay attention to all the rules.

**Why are there contaminants in my water?**
Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

**Do I need to take special precautions?**
Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have under-gone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about not only their drinking water, but food preparation, personal hygiene, and precautions in handling infants and pets from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

**Lead in drinking water**
If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City of Germantown is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead

**Water system security**
Following the events of September 2001, we realize that our customers are concerned about the security of their drinking water. We urge the public to report any suspicious activities at any utility facilities, including treatment plants, tanks, fire hydrants, etc. to 757-7338.

**Este informe contiene información muy importante. Tradúscalo o hable con alguien que lo entienda bien.**

**For more information about your drinking water, please call Mike O'Neill, Lead Water Plant Operator, City of Germantown at (901) 751-7692.**

# Water Quality Data

**What does this chart mean?**

- **MCLG** - Maximum Contaminant Level Goal, or the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
- **MCL** - Maximum Contaminant Level, or the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.
- **Parts per million (ppm) or Milligrams per liter (mg/l)** – explained as a relation to time and money as one part per million corresponds to one minute in two years or a single penny in $10,000.
- **Parts per billion (ppb) or Micrograms per liter** - explained as a relation to time and money as one part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.

| Contaminant | Violation Yes/No | Level Found | Range of Detections | Date of Sample | Unit Measurement | MCLG | MCL | Likely Source of Contamination |
|---|---|---|---|---|---|---|---|---|
| HAA5 Haloacetic Acids | N | 1.5 | 1.0-2.0 | 2019 | ppb | NA | 60 | By-product of drinking water disinfection |
| Copper | N | $90^{th}$%= 1.5 | 0.14-3.75 | 2019 | ppm | 1.3 ppm | Action Level= 90% of the homes tested must have copper levels less than 1.3 ppm | Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives |
| Fluoride | N | 0.9 | 0.77-1.06 | 2019 | ppm | 4 | 4 | Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories |
| Nitrate | | 0.182 | 0.0-0.37 | 2019 | ppm | 10 | 10 | Erosion of natural deposits; leaching from septic tanks; runoff from fertilizer use. |
| Lead ** | N | $90^{th}$%= 0.003 | 0.0-0.006 | 2019 | ppm | 0 | Action Level= 90 % of the homes tested must have lead levels less than 0.015 ppm | Corrosion of household plumbing systems, erosion of natural deposits |
| Sodium | N | 6.95 | 6.94-6.97 | 2017 | ppm | N/A | N/A | Erosion of natural deposits; used in water treatment |
| TTHM [Total trihalomethanes] | N | 9.9 | 8.1-11.7 | 2019 | ppb | n/a | 80 | By-product of drinking water chlorination |
| Chlorine | N | 0.82 | 1.57-0.52 | 2019 | ppm | 4 | 4 | Water additive used to control microbes. |

**Iron:** *Iron occurs naturally in our raw water and occasionally accumulates in the distribution system. Iron shows up as "red" or"rusty" water at your tap. Although you do not want to drink water that is not clear, iron is not considered to be a hazard to your health. We test for iron daily and it is usually around 0.02 ppm. The aesthetic limit for iron is 0.3 ppm.*

**Copper:** *Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.*

**During the most recent round of lead and copper testing, none out of the sixty-one (61) sites sampled contained concentrations exceeding the action level for lead. Eighty-six (86) sites were tested for copper. Fifteen (15) were above the action level.

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other; potentially-harmful, bacteria may be present. In 2019, we sampled for coliform bacteria at almost 500 locations in the water system and had 0 samples test positive.

While your drinking water meets EPA standards for trihalomethanes, it does contain low levels. Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous system, and may have an increased risk of getting cancer.

**Think before you flush!**

Flushing unused or expired medicines can be harmful to your drinking water. Properly disposing of unused or expired medications helps protect you and the environment. Keep medications out of Tennessee's waterways by disposing in one of the State's permanent pharmaceutical take back bins. There are nearly 100 take back bins across the State. To find a convenient location please visit: http://tdeconline.tn.gov/rxtakeback/

# IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

In 2019, the City of Germantown did not provide prompt notification to Tennessee Department of Environment and Conservation (TDEC) of an increase in dosage of a chemical used to coat the pipes in the water system. This increase was in place for a short period of time to rectify reports (0.4% of total customers) of "blue water" caused by copper leaching from consumer service lines into their drinking water. This problem has since been resolved, but has led to TDEC requiring additional lead and copper testing and water quality samples for a 12 month period. The City of Germantown remains in compliance with all regulations and the water is safe to drink.

**What is being done?**

The City of Germantown has actively followed the additional testing parameters and has been in continuous contact with the local TDEC office to confirm compliance. The City of Germantown remains diligent in taking samples to ensure that all contaminants are below the action levels and promptly reporting back to the customer and TDEC the results in order to meet all EPA health standards.

During the most recent round of lead and copper testing, out of 61 sites sampled, none contained concentrations exceeding the action level for lead. Eighty-six sites were tested for copper. Fifteen were above the action level. All customers have been notified of results within the required time frame.

For more information, please contact Mike O'Neill, Water Treatment Plant Operator, at (901) 751-7692 or MOneill@Germantown-TN.gov.

**What should I do?**

There is nothing you need to do at this time.

*The City is required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not the drinking water meets health standards. During 2019, the City performed the required lead and copper tests and informed consumers of the laboratory results from lead and copper tests within the required time.*

**Lead:** *Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.*

**Copper:** *Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.*

*Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.*

This notice is being sent to you by The City of Germantown.

State Water System ID#: 0000262

Date distributed: _____